

**REMARKS**

This Application has been carefully reviewed in light of the Office Action mailed June 20, 2003 (the "Office Action"). In order to advance prosecution of this case, Applicants withdraw from prosecution Claims 1-36 and 47-84. Therefore, Claims 37-46 and 85-107 remain pending in the Application. Applicants respectfully request reconsideration and favorable action in this case.

**Election Restriction**

The Office Action states that Claims 1-26 and 47-84, the subject of an election restriction, have been withdrawn from examination by the Examiner as being drawn to a non-elected invention. *See* Office Action, ¶ 2. Applicants note that Claims 1-36 and 47-84 are withdrawn from examination as being drawn to a non-elected invention. Applicants reserve the right to file a divisional application which presents the subject matter of Claims 1-36 and 47-84 for examination on the merits.

**Office Action Discrepancy**

At the time of the Office Action, Claims 103-107 were pending in this patent application. The Office Action Summary indicates that Claims 103-107 are rejected. However, the Detailed Action portion of the Office Action does not discuss Claims 103-107. Applicants thus respectfully request clarification regarding the status of Claims 103-107.

**Section 103 Rejections – Claims 37-40, 44-46, 85-88, 92-94 and 95-102**

The Examiner rejects Claims 37-40, 44-46, 85-88, 92-94 and 95-102 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,949,760 to Stevens et al. ("*Stevens*"). Applicants respectfully traverse these rejections for the reasons discussed below.

In order to establish a *prima facie* case of obviousness of a claimed invention, **all** claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981 (CCPA 1974). "**All** words in a claim must be considered in judging the patentability of that claim against the prior art." *In re Wilson*, 424 F.2d 1382, 1385 (CCPA 1970) (*emphasis added*). "Distilling an invention down to the 'gist' or 'thrust' of an invention disregards the

requirement of analyzing the subject matter 'as a whole.'" M.P.E.P. § 2141.02; *See W.L. Gore & Associates, Inc. v. Garlock, Inc.*, 220 U.S.P.Q. 303 (Fed. Cir. 1983), *cert. denied*, 469 U.S. 851 (1984).

Applicants initially note that the Office Action makes multiple statements regarding the "general" recitation of the claims. For example, the Office Action states that as to Claims 37, 85-88 and 95, "the claim **in general** recites a state-driven process comprising a start-up state 220, a learning state 222 and an operational state 224 as supported by applicant's figure 7." *See* Office Action, ¶ 4 (*emphasis added*). The Office Action also contends that certain prior art "**in general**" teaches "the **general** state-driven process of a start-up state 220, a learning state 222, and an operational state 224." *See id.* (*emphasis added*). As indicated above however, Applicants note that in order to obviate a claim, **all** claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981 (CCPA 1974).

Applicants respectfully submit that the references cited in the Office Action fail to disclose, teach, or suggest all the elements of Claim 37. Claim 37 recites "transitioning the wireless node to a normal operating state in response to determining the operational data is within predefined parameters." The Office Action suggests that *Stevens* discloses an operational state in steps 40, 42, and 44. *See* Office Action, ¶ 4, page 4. Further, the Office Action states that "the 'predefined parameters' are part of the stored performance criterion in step 36." *See id.* However, the Office Action does not cite any portion of *Stevens* as disclosing *transitioning* the wireless node to a normal operating state *in response to determining* the operational data *is within* predefined parameters, nor does *Stevens* disclose, teach or suggest these elements. *Stevens* discloses an operation on certain data to produce link assignments according to performance criterion stored at step 36. *See Stevens*, col. 3, lines 8-11, 25-26. However, *Stevens* does not disclose transitioning to a normal operating state in response to a particular determination that operational data is within stored performance criterion. Thus, even assuming that the Office Action's assertions regarding the teachings of *Stevens* are correct, *Stevens* still does not disclose, teach or suggest "transitioning the wireless node to a normal operating state in response to determining the operational data is within predefined parameters."

Claim 37 also recites "collecting operational data in the learning state and modifying the operating parameters based on operational data." The Office Action suggests that *Stevens* teaches this particular element of Claim 37 since "data is [collected] at step 32 (i.e. the operating parameters are modified) . . . ." See Office Action, ¶ 4, page 4. However, in the cited step of *Stevens*, no data is collected. See *Stevens*, col. 2, lines 64-67. Rather, in step 32 data that has already been collected is compiled into a table of connectivities. See *id.* If the Examiner actually meant that step 30 of *Stevens* teaches the collection of operational data in the learning state, then all the elements of Claim 37 are not taught because step 30 is not in the "learning state" of *Stevens*, according to the Office Action's definition of the learning state as steps 32, 34, and 38. See Office Action, ¶ 4, page 4. If the Examiner were to include step 30 of *Stevens* as part of the *Stevens* "learning state," then the first step in the method disclosed by *Stevens* (step 30) would be in the learning state and it would be impossible for *Stevens* to disclose a prior "start up state." See *Stevens*, Figure 2. Thus, either *Stevens* does not teach the collection of operational data in the learning state or *Stevens* does not disclose a start up state. In either case, *Stevens* does not disclose, teach or suggest all elements of Claim 37.

Additionally, the Office Action notes that the "general state-driven process" of Applicant's invention is taught in general by what is well known in the art prior to Applicant's invention and that "all of the limitations within each state are either inherently taught or obvious based on what is well known in the art and the teachings of *Stevens*." See Office Action, ¶ 4, page 3. Applicants are unclear as to what "well known" art the Examiner is using to reject Claim 37. Applicants respectfully request the Examiner to state such "well known" art and to cite a reference in support. See M.P.E.P. § 2144.03.

Claim 37 also recites "activating the wireless node in a start up state," "automatically determining in the start up state a plurality of operating parameters for the wireless node," "configuring the wireless node based on the operating parameters," and "activating a radio frequency (RF) system for the wireless node." The Office Action suggests that "these limitations are inherently taught or obvious since a skilled artisan would recognize that in order to obtain information from neighboring nodes, a node must be initially configured with

a plurality of operating parameters; these parameters assisting the node to communication over an RF spectrum." Office Action, ¶ 4, page 3. Applicants are unclear about whether, for each of these elements, the Examiner is relying on the inherently taught assertion or, alternatively, on the obviousness argument. Applicants respectfully request the Examiner to state with respect to each of these elements whether the Examiner believes the element is inherently taught by *Stevens* or, alternatively, is obvious from what is well known in the art.

If the Examiner is attempting to argue that one or more limitations are inherently taught by *Stevens*, Applicants respectfully traverse the Examiner's assertion. "In relying on the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art." *Ex parte Levy*, 17 U.S.P.Q.2d 1461, 1464 (Bd. Pat. App. & Inter. 1990) (*emphasis in original*); M.P.E.P. § 2112. The mere fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic. *See In re Rijckaert*, 9 F.3d 1531, 1534 (Fed. Cir. 1993). The Office Action fails to provide the required basis in fact or technical reasoning to support a rejection based on inherency. While "obtain[ing] information from neighboring nodes" might involve a node "be[ing] initially configured with a plurality of operating parameters; these parameters assisting the node to communication over an RF spectrum," such a process does not have to occur to obtain information from neighboring nodes. Even in *Stevens*, for example, the node does not have to communicate over the *RF spectrum*, nor must there be a *plurality* of initial operating parameters *that assist* the node to RF spectrum communication.

Alternatively, if the Examiner is attempting to argue that one or more of the elements of Claim 37 are obvious from what is well known in the art, Applicants respectfully request Examiner to cite a reference in support of such art for each such element. *See* M.P.E.P. § 2144.03.

For at least the reasons discussed above, Applicants respectfully request that the rejection of Claim 37 be withdrawn.

Claims 38-40 and 44-46 each depends from Claim 37 and therefore includes each of the elements of Claim 37. Applicants thus respectfully request that the rejections of Claims 38-40 and 44-46 be withdrawn because, as discussed above, the cited prior art does not disclose, teach, or suggest every element of Claim 37.

The Office Action rejects Claim 85 for the same reasons as it rejects Claim 37. *See* Office Action, ¶ 4, page 4. Thus, Applicants respectfully request that the rejection of Claim 85 be withdrawn for at least the same reasons discussed above with respect to Claim 37.

Claims 86-88 and 92-94 each depends from Claim 85 and therefore includes each of the elements of Claim 85. Applicants thus respectfully request that the rejections of Claims 86-88 and 92-94 be withdrawn because, as discussed above, the cited prior art does not disclose, teach, or suggest every element of Claim 85.

Claim 95 recites "automatically determining a Internet protocol (IP) topography for a wireless router" and "automatically determining a radio frequency (RF) topology for the wireless router based on information exchanged with neighboring wireless routers identified using the IP topology." The Office Action does not cite any portion of *Stevens* or other prior art as disclosing, teaching or suggesting these elements. *Stevens* is silent as to automatically determining a Internet protocol topography for a wireless router and as to automatically determining a radio frequency topology for the wireless router based on information exchanged with neighboring wireless routers identified using the IP topology. Thus, Applicants respectfully submit that Claim 95 is patentable over the cited art and request that the rejection of Claim 95 be withdrawn.

Claims 96-102 each depends from Claim 95 and therefore includes each of the elements of Claim 95. Applicants thus respectfully request that the rejections of Claims 96-102 be withdrawn because, as discussed above, the cited prior art does not disclose, teach or suggest every element of Claim 95.

**Section 103 Rejections – Claims 41-43 and 89-91**

The Office Action rejects Claims 41-43 and 89-91 under 35 U.S.C. § 103(a) as being unpatentable over *Stevens* in view of U.S. Patent No. 6,421,731 to Ciotti, Jr., et al. ("*Ciotti*"). Applicants respectfully traverse these rejections for the reasons discussed below.

Claims 41, 42 and 43 each depends from Claim 37 and therefore includes each of the elements of Claim 37. Thus, Applicants respectfully request that the rejections of Claims 41, 42 and 43 be withdrawn at least because, as discussed above, the cited prior art does not disclose, teach or suggest every element of Claim 37.

Moreover, Claim 41 recites "collecting operational data in the normal operating state and transitioning back to the learning state in response to determining the operational data is outside the predefined parameters." The Office Action suggests that *Ciotti* discloses this element at figure 11a of *Ciotti*. See Office Action, ¶ 5. Figure 11a of *Ciotti* discloses the updating of a routing table in response to a router advertisement. However, there is no disclosure in *Ciotti*, either in figure 11a or otherwise, of transitioning back to the learning state in response to determining the operational data is outside the predefined parameters. Therefore, for at least these additional reasons, Applicants respectfully submit that Claim 41 is patentable over the cited art and request that the rejection of Claim 41 be withdrawn.

Additionally, Claim 42 recites "transitioning from the normal operating state back to the learning state in response to a change in neighboring wireless topology." The Office Action suggests that *Ciotti* discloses this element at figure 11a of *Ciotti*. See Office Action, ¶ 5. Figure 11a of *Ciotti* discloses the updating of a routing table in response to a router advertisement. However, there is no disclosure in *Ciotti*, either in figure 11a or otherwise, of transitioning from the normal operating state back to the learning state in response to a change in neighboring wireless topology. Therefore, for at least these additional reasons, Applicants respectfully submit that Claim 42 is patentable over the cited art and request that the rejection of Claim 42 be withdrawn.

Furthermore, Claim 43 recites "transitioning from the normal operating state back to the learning state in response to accepting a modification in operating parameters requested

by a neighboring node." The Office Action suggests that *Ciotti* discloses this element at figure 11a of *Ciotti*. See Office Action, ¶ 5. Figure 11a of *Ciotti* discloses the updating of a routing table in response to a router advertisement. However, there is no disclosure in *Ciotti*, either in figure 11a or otherwise, of transitioning from the normal operating state back to the learning state in response to accepting a modification in operating parameters requested by a neighboring node. Therefore, for at least these additional reasons, Applicants respectfully submit that Claim 43 is patentable over the cited art and request that the rejection of Claim 43 be withdrawn.

Claims 89, 90 and 91 each depends from Claim 85 and therefore includes each of the elements of Claim 85. Thus, Applicants respectfully request that the rejections of Claims 89, 90 and 91 be withdrawn at least because, as discussed above, the cited prior art does not disclose, teach, or suggest every element of Claim 85.

Moreover, Claim 89 recites "[t]he wireless node of Claim 85, the instructions operable upon processing to collect operational data in the normal operating state and to transition back to the learning state in response to determining the operational data is outside the predefined parameters." For at least the reasons given above for Claim 41, Applicants respectfully submit that Claim 89 is patentable over the cited art and request that the rejection of Claim 89 be withdrawn.

Additionally, Claim 90 recites "[t]he wireless node of Claim 85, the instructions operable upon processing to transition from the normal operating state back to the learning state in response to a change in the neighboring wireless topology." For at least the reasons given above for Claim 42, Applicants respectfully submit that Claim 90 is patentable over the cited art and request that the rejection of Claim 90 be withdrawn.

Furthermore, Claim 91 recites "[t]he wireless node of Claim 85, the instructions operable upon processing to transition from the normal operating state back to the learning state in response to accepting a modification and operating parameters requested by a neighboring node." For at least the reasons given above for Claim 43, Applicants

respectfully submit that Claim 91 is patentable over the cited art and request that the rejection of Claim 91 be withdrawn.

Furthermore, nothing in *Stevens* or *Ciotti* or any other cited references suggests or motivates the proposed combination, nor does the Office Action provide any evidence that suggests the proposed modification. The Office Action states that "[a]s both reference[s] disclose wireless networks in general, and more specifically wireless routing, examiner notes a motivation to combine the subject matter as a whole for both references." *See* Office Action, ¶ 5, page 6. However, the Federal Circuit has held that broad conclusory statements by the Examiner regarding the teaching of multiple references, standing alone, are not "evidence." *See In re Dembiczak*, 175 F.3d 994, 999 (Fed. Cir. 1999) (*emphasis added*). Instead, the Examiner must explain the specific understanding or principle within the knowledge of the skilled artisan that would motivate the combination. *See id.* Thus, the Office Action's suggestion that a motivation exists merely because both references disclose wireless routing does not provide the required motivation to combine the references. If the Examiner is relying on "common knowledge" or "well known" art in support of his rationale for combining the references, the Examiner is requested to produce a reference in support of his position pursuant to M.P.E.P. § 2144.03. If the Examiner is relying on personal knowledge to supply the required motivation or suggestion to combine, Applicants respectfully request that the Examiner produce an affidavit supporting such facts pursuant to M.P.E.P. § 2144.03. For at least this additional reason, Applicants respectfully submit that Claims 41-43 and 89-91 are patentable over the cited art.



**CONCLUSIONS**

Applicants have made an earnest attempt to place this case in condition for allowance. For the foregoing reasons, and for other reasons clearly apparent, Applicants respectfully request full allowance of all pending claims.

If the present application is not allowed and/or if one or more of the rejections is maintained, Applicants hereby request a telephone conference with the Examiner and further request that the Examiner contact the undersigned attorney to schedule the telephone conference.

No fee is believed to be due. However, the Commissioner is hereby authorized to charge any fees to Deposit Account No. 02-0384 of Baker Botts L.L.P.

Respectfully submitted,  
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